

Claims

1. A method for generating a true random number, characterized in that the true random number is generated on the basis of a stochastically distributed duration (T) of an electrical charge reversal process.

2. The method as claimed in claim 1, characterized in that the charge reversal process involves charge reversal of at least one memory cell (10).

3. The method as claimed in claim 2, characterized in that at least one memory cell (10) is a memory cell of an EEPROM (12).

4. The method as claimed in claim 2 or 3, characterized in that at least one memory cell (10) is a FLASH memory cell.

5. The method according to one of the preceding claims, characterized in that the charge reversal process is performed using a charge pump (14).

6. The method according to one of the preceding claims, characterized in that the stochastic duration (T) of the charge reversal process is recorded using a counter (16).

7. The method according to one of the preceding claims, characterized in that

it is performed by an embedded system (18), in particular by an engine control system (18) of a motor vehicle.

8. An apparatus suitable for generating a true random number, characterized in that it generates the true random number on the basis of a stochastically distributed duration (T) of an electrical charge reversal process.

9. The apparatus as claimed in claim 8, characterized in that it has at least one memory cell (10) which undergoes electrical charge reversal in order to generate the random number.

10. The apparatus as claimed in claim 9, characterized in that at least one memory cell (10) is a memory cell of an EEPROM (12).

11. The apparatus as claimed in claim 9 or 10, characterized in that at least one memory cell (10) is a FLASH memory cell.

12. The apparatus according to one of the claims 8 to 11, characterized in that it has a charge pump (14) for performing the charge reversal process.

13. The apparatus according to one of the claims 8 to 12, characterized in that it has a counter (16) for recording the stochastically distributed duration (T) of the charge reversal process.

14. The apparatus according to one of the claims 8 to 13,

1 c h a r a c t e r i z e d i n t h a t

2 i t i s a n e m b e d d e d s y s t e m (18), i n p a r t i c u l a r a n e n g i n e c o n t r o l  
3 s y s t e m (18) o f a m o t o r v e h i c l e .

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